

## CHAPTER 8

# OPEN SPACE AND CONSERVATION ELEMENT



# CHAPTER 8

## OPEN SPACE AND CONSERVATION ELEMENT



### **GUIDING PRINCIPLE**

*The City of Carson is committed to conserving and enhancing its key natural features and resources, including, but not limited to, trees and vegetation, open space, water, and other natural resources. To this end, the City shall continue promoting environmental awareness and practices to protect these resources.*

### **1.0 INTRODUCTION**

At one time, Carson had ample accessible open spaces and natural resources within its boundaries. During the Rancho period in California history, vast herds of cattle freely roamed the Dominguez Rancho, of which the City of Carson is a part. The area had a rich endowment of natural resources: abundant potable groundwater, prime agricultural soils, a mild and healthful climate, and oil. However, these open space areas and resources began to diminish as the City grew and the region urbanized. As the area population grew, economics dictated that the most profitable use of land was not for agricultural production but rather development.

### **2.0 STATE LAW REQUIREMENTS**

The California State Government Code mandates that all general plans include both an open space and a conservation element. The open space and conservation elements complement one another due to the overlap in State requirements and the inter-relationship of issues within each element. This is particularly true in Carson, which no longer has abundant open space and undeveloped natural resources. It is therefore important to focus on the conservation of the City's remaining resources



and open spaces. For these reasons, the Open Space and Conservation Elements have been combined in the Carson General Plan.

## **2.1 OPEN SPACE ELEMENT**

Government Code Section 65302(e) stipulates that a general plan include an open space element. The contents of the open space element are identified in Government Code Section 65560 as follows:

*“(b) Open space land is any parcel or area of land or water which is essentially unimproved and devoted to an open space use...and which is designated on a local, regional or state open space plan as any of the following:*

- (1) Open space for the preservation of natural resources including, but not limited to, areas required for the preservation of plant and animal life...*
- (2) Open space used for the managed production of resources, including but not limited to...agricultural lands... areas required for recharge of ground water basins...and areas containing major mineral deposits, including those in short supply.*
- (3) Open space for outdoor recreation, including but not limited to, areas of outstanding scenic, historic and cultural value; areas particularly suited for park and recreation purposes...and areas which serve as links between major recreation and open space reservations, including utility easements...trails, and scenic highway corridors.*
- (4) Open space for public health and safety, including, but not limited to, areas which require special management or regulation because of hazardous or special conditions such as earthquake fault zones, unstable soils areas, floodplains, watersheds, areas presenting high fire risks, areas required for the protection of water quality and water reservoirs and areas required for the protection and enhancement of air quality.”*

The intent of the open space element is to assure that cities “recognize that open space land is a limited and valuable resource which must be conserved wherever possible” and “will prepare and carry out open space plans which, along with state and regional open space plans, will accomplish the objectives of a comprehensive open space program.” (Government Code Section 65562.)

## **2.2 CONSERVATION ELEMENT**

Government Code Section 65302(d) requires that the general plan include a conservation element for the “conservation, development, and utilization of natural resources including water and its hydraulic force...soils, rivers and other waters...wildlife, minerals, and other natural resources. That portion of the



conservation element including waters shall be developed in coordination with any countywide water agency and with all district and city agencies which have developed, served, controlled or conserved water for any purpose for the county or city for which the plan is prepared... The conservation element may also cover:

- The reclamation of land and waters.
- Prevention and control of streams and other waters.
- Regulation of the use of land in...areas required for the accomplishment of the conservation plan.
- Prevention, control, and correction of the erosion of soils, beaches, and shores.
- Protection of watersheds.
- The location, quantity and quality of the rock, sand and gravel resources.
- Flood control.”

### **3.0 SUMMARY OF FINDINGS**

#### **3.1 OPEN SPACE**

The City’s open space is comprised of Recreational Open Space which includes parks and a public golf course and General Open Space which consists of utility transmission corridors, drainage and flood control facilities (i.e., Dominguez Channel, Compton Creek and Wilmington Channel), the Blimp Port. The various forms of open space within the City and the associated current acreage is summarized in Table OSC-1, *Open Space in Carson*, below.

**Table OSC-1  
Open Space in Carson**

Type of Open Space	Approximate Acreage
Recreational Open Space <ul style="list-style-type: none"> <li>• Parks</li> <li>• Victoria Public Golf Course</li> </ul>	153 162
General Open Space <ul style="list-style-type: none"> <li>• Blimp Port</li> <li>• Drainage Courses and Utility Transmission Corridors</li> </ul>	30 254
<b>TOTAL</b>	<b>599</b>

In addition to the above, substantial open space is incorporated into street medians and parkways throughout the City. Also, public schools in the City include approximately 197 acres, of which about 60 percent or 118 acres are open space. Finally, California State University Dominguez Hills (CSUDH) has 125 acres of existing and planned recreational open space (including the planned 85-acre National Training Center).



There are also other areas in Carson which contain temporary open space. These areas are designated for a variety of uses other than Recreational and/or General Open Space. They include the Dominguez Public Golf Course, which is designated for General Commercial use on the Land Use Policy Map, and closed landfills which have not yet been fully remediated.

### **3.1.1 OPEN SPACE FOR THE PRESERVATION OF NATURAL RESOURCES**

The Government Code requires that open space for the preservation of natural resources be incorporated into the General Plan. Such resources include areas required for the preservation of plant and animal life, areas of ecological and other scientific study value, rivers, streams, bays and estuaries, coastal beaches, and lake shores. The only such area identified within Carson is the lake within the Carson Village Mobilehome Park. This lake, covering approximately 17 acres, provides habitat for a variety of plants and small animals.

### **3.1.2 OPEN SPACE FOR THE PRODUCTION OF RESOURCES**

In Carson, open space used for the production of resources includes agricultural lands and areas used for the production and management of oil and petroleum products.

Excluding small agricultural areas along the utility transmission corridors, there are approximately 62 acres of property within the City which are under agricultural production. Under the Zoning Ordinance, agricultural uses are permitted within the Residential - Agricultural, General Commercial, and Open Space zones. While agricultural production is not a significant factor in the City's economy, agriculture does offer a positive contribution to the City's inventory of open space.

As discussed later in this Element, portions of Carson are located within the Dominguez and Wilmington Oil Fields. As a result, there are large areas of the City devoted to the management and production of oil and petroleum products. These areas are designated Heavy Industrial on the Land Use Policy Map due to the nature of activities associated with these uses. These areas have been approved for approximately 4.7 million square feet of commercial and industrial development. That development was underway as of adoption of this Element. Continued buildout will proceed based on market factors.

### **3.1.3 OPEN SPACE FOR OUTDOOR RECREATION**

As discussed in the Parks, Recreation and Human Services Element, the recreational land in the City totals 315 acres (including Victoria Park and Victoria Golf Course, both County facilities). The City's target for the ratio of park acres to population is four acres per 1,000 population. The current ratio of park acres to population is 3.5 acres per 1,000 (counting the Victoria Golf Course). However, this ratio does not take into account the joint use of public school athletic fields or the Dominguez Golf Course (designated General Commercial). If these facilities are included, the City meets its target parkland-to-population ratio.



Because the City is virtually built-out and vacant land (other than closed landfills which require remediation) is scarce, opportunities for new park development are limited. In addition to the joint use of public school facilities and commercial recreational uses, existing open space in the City which may be suitable for recreation purposes include: utility transmission corridors, areas along the banks of drainage channels, and closed landfills (after appropriate remediation).

*Additional information regarding outdoor recreation can be found in: Sections 3.2, Circulation, and 3.12, Parks and Recreation, in the Existing Conditions Report; and Chapter 9, Parks, Recreation and Human Services Element in this General Plan.*

### **3.14 OPEN SPACE FOR PUBLIC HEALTH AND SAFETY**

“Open space for public health and safety,” is defined as those “areas which require special management or regulation because of hazardous or special conditions.” There are four types of special management areas in Carson:

- Utility Corridors. In order to protect the health and safety of the public, these underground utility and overhead electric transmission corridors are severely constrained for human habitation or employment by law. Nevertheless, within these constraints, many of the utility corridors within the City are suitable for use as greenbelts, mini parks, recreation trails, and open space commercial uses such as wholesale nurseries and growing grounds.
- Landfills. The 15 closed landfills in Carson are severely restricted by State and Federal regulations. Of those closed landfills, eight have been remediated to varying degrees (e.g., properly capped, appropriate collection systems installed, etc.). The remaining landfills are either vacant and unremediated or are used as golf courses.
- Flood Control Channels. The primary purpose of flood control channels is the conveyance of water. However, the Dominguez Channel levees can also be used as recreational trails, with suitable improvements and off-levee connections.
- Earthquake Fault Zones. The Avalon-Compton Fault Zone occupies a small area in the northeastern area of the City. A site-specific geotechnical report is required for construction within  $\frac{1}{8}$  mile on either side of the Fault Zone.

*Additional information regarding open space for public health and safety can be found in: Sections 3.4, Geologic Hazards, and 3.7, Hazardous Materials, of the Existing Conditions Report; and Chapters 2, Land Use Element, and 6, Safety Element, of this General Plan.*



## **3.2 CONSERVATION**

### **3.2.1 WATER RESOURCES**

Southern California would not exist as an urbanized region without the importation, careful management, storage, and reuse of its water supply. Water conservation, the use of reclaimed water, and the control and treatment of runoff pollution is critically important to Carson and the entire region.

#### **AGENCIES RESPONSIBLE FOR THE SUPPLY OF WATER**

A number of public and quasi-public agencies act cooperatively with one another to supply, distribute, conserve and maintain water resources for the City of Carson and the Southern California region.

Agencies responsible for delivering wholesale water to the area include the Metropolitan Water District of Southern California (MWD) and the West Basin Municipal Water District (WBMWD). MWD imports water to the region and operates several filtration plants to treat water supplies. WBMWD provides supplemental imported water to local retail water agencies. The MWD and WBMWD act cooperatively to conserve both groundwater and surface water resources.

“Retail” water service in the City is provided by the California Water Company and the Southern California Water Company, Southwest District (SCWD). Approximately 80 percent of the water supply distributed by California Water Company is comprised of imported water, 18 percent is groundwater, and 2 percent desalinated water. Approximately 80 percent of the water supply distributed by the SCWD is comprised of imported water and 20 percent is groundwater.

The Los Angeles Regional Water Quality Control Board regulates water quality in the region.

#### **GROUNDWATER RESOURCES**

##### **Groundwater Basins**

There are two groundwater basins which underlie Carson: the Central Water Basin and the West Coast Basin.

Groundwater in the Central Basin is dependent upon local storm runoff, imported and recycled water for groundwater recharge, and the injection of imported water from the inland side of the Alamitos Seawater Intrusion Barrier. The Central Basin is also replenished through subsurface flows from the San Gabriel Valley into the Basin and precipitation that falls directly on the Montebello Forebay and percolates into the Basin.



Groundwater for the West Coast basin originates from subsurface flow from the Central basin and injection along the sea water barrier system. Virtually all of the major drainage courses flowing through the Central and West Coast Basins have been developed into a comprehensive system of dams, flood control channels, and percolation ponds for artificially recharging the basins.

Los Angeles County studies have indicated that 90 percent of the rain and runoff in the County either percolates naturally into the ground or is captured in the flood control reservoirs for later release to recharge the groundwater basins.

### **Aquifers**

Several aquifers exist within the Central and West Coast Basins. In the vicinity of Carson, these include the Gage/Gardena, Lynwood, Silverado, and Sunnyside aquifers. Their depths range from 150 to 600 feet, and they are primarily replenished by area rainfall.

### **GROUNDWATER QUALITY**

The Federal Safe Water Drinking Water Act of 1974 and its 1986 amendments are intended to ensure the quality of water supplies. The quality and safety of drinking water in the United States is regulated by the Federal government through the Environmental Protection Agency (EPA). In California, those standards are enforced by the California Department of Health Services (DOHS).

The State and Regional Water Quality Control Boards currently administer the National Pollutant Discharge Elimination System (NPDES) permit regulations. Due to recent legislation, the scope of NPDES regulations has been greatly expanded to include stormwater runoff. Stormwater discharges consist primarily of non-point source surface runoff from streets, lawns, parks, and upland undeveloped areas.

The City is a permittee under the Los Angeles County Municipal NPDES permit. One of its obligations under the Municipal NPDES permit is to “include watershed and storm water quality and quantity management considerations and policies when updating land use, housing, conservation, and open space elements” of its General Plan.

To that end, any new development or redevelopment situated in an environmentally sensitive area or in a sensitive ecological area, or subject to development planning program requirements specified in the Municipal NPDES permit, shall be evaluated for post-construction runoff pollution mitigation measures including, if necessary, infiltration or mechanical treatment controls (e.g., detention basins, wet ponds, vortex separation systems, catch basin inserts, oil/water separators, vegetative filters, pervious asphalt or pavement, and cisterns). Further, peak flow from any new development or redevelopment that enters a natural drainage system (e.g., an unlined stream, river, or channel) shall not be greater than pre-development levels. The purpose of controlling peak flow is to prevent stream erosion and to protect stream habitat.



### **Water Quality within the Los Angeles Regional Water Quality Control Board Region**

The general quality of groundwater within the Los Angeles Regional Water Quality Control Board (RWQCB) Region has degraded substantially over the years as a result of fertilizers and pesticides; nitrogen and pathogenic bacteria from overloaded or improperly sited septic tanks; storage tanks (both aboveground and underground) which have leaked or are leaking hazardous substances into the subsurface; and a variety of other sources and/or conditions.

### **West Coast and Central Basins Water Quality**

Seawater intrusion which has historically occurred in the West Coast and Central Basins is now under control in most areas through an artificial recharge system consisting of spreading basins and injection wells that form fresh water barriers along the coast. Groundwater in the lower aquifers of these basins is generally of good quality, but large plumes of saline water have been trapped behind the barrier of injection wells within the West Coast Basin, degrading significant volumes of groundwater with high concentrations of chloride. Furthermore, the quality of groundwater in parts of the upper aquifers of both basins is degraded by both organic and inorganic pollutants from a variety of sources, such as leaking tanks, leaking sewer lines, and illegal discharges. As the aquifers and confining layers in these alluvial basins are typically interconnected, the quality of groundwater in the deeper production aquifers is threatened by the migration of pollutants from the upper aquifers.

*Additional information regarding water conservation and water quality can be found in: Sections 3.5, Hydrology/Drainage, and 3.11, Infrastructure/Utilities, of the Existing Conditions Report; and Chapter 4, Transportation and Infrastructure Element, of this General Plan.*

## **3.2.2 SOLID WASTE**

In 1989, the California Legislature enacted the California Integrated Waste Management Act, in an effort to address solid waste problems and capacities in a comprehensive manner. The law required each city and county to divert 50 percent of its waste from landfills by the year 2000. The law further required every city and county to prepare a Source Reduction and Recycling Element (SRRE). Carson's SRRE was approved in 1996.

Cities are required to meet the requirements of this law while new regulations are being developed. The new regulations are expected to be enacted in 2002.

A private company, provides waste collection services for the City of Carson. Waste Management collects approximately 70,000 tons from residential customers and 153,500 tons from commercial and industrial customers per year. The disposal service uses traditional methods of solid waste collection, with standard trash trucks and crews. The service also includes the pickup of sorted recyclable materials, which are taken directly to a company that separates and sells them.



Solid waste collected by Waste Management is taken to the company's waste transfer station in Carson, where it is sorted. After the materials are sorted, special wastes such as tires, green waste, steel, and wood are sent to special facilities for disposal and recycling. The remaining waste materials are loaded onto trailers and taken to a landfill.

*Additional information regarding solid waste can be found in: Section 3.11, Infrastructure/Utilities, of the Existing Conditions Report; and Chapter 4, Transportation and Infrastructure Element, of this General Plan.*

### **3.2.3 ENERGY**

#### **ENERGY RESOURCES**

Energy resources available to Carson play an important role in determining the type and amount of future development in the community. In recent years, dramatic growth in demand and the restructuring of the energy industry have resulted in shortfalls in the provision of electricity to consumers. New development and higher standards of living will result in increased energy needs in the future. Conservation of energy resources, such as oil, electricity and natural gas, is critical in light of their limited supply and environmental concerns related to their production and distribution.

Most traditional energy resources are imported. Natural gas is imported by the Southern California Gas Company, while electricity is provided by the Southern California Edison Company (SCE). Regional and local distribution facilities for both electricity and natural gas are located within Carson.

Because of past and possible future shortages, alternative energy sources must be developed to supplement conventional sources. Given the area's sunny climate, the most important alternative and renewable energy resource in Carson is solar. This source has considerable potential and can be developed to substitute for oil, gas, and other energy supplies. Because of solar energy's ability to substitute for fossil fuels, it can also be an important tool in the battle against air pollution.

#### **PETROLEUM PRODUCTS**

Portions of the City of Carson are located within the Dominguez and Wilmington Oil Fields. There are also several crude oil and petroleum product pipelines that transect the City.

*Additional information relating to the provision of electricity and natural gas can be found in: Section 3.11, Infrastructure/Utilities, of the Existing Conditions Report; and Chapter 4, Transportation and Infrastructure Element, of this General Plan. More detailed information relating to crude oil, petroleum products and pipelines can be found in Section 3.7, Hazardous Materials, of the Existing Conditions Report, and Chapter 6, Safety Element, of this General Plan.*



## 4.0 PLANNING ISSUES, GOALS, POLICIES AND IMPLEMENTATION

The acronyms listed below are used for the implementation measures:

RA/D: Responsible Agency/Division  
FS: Funding Source  
TF: Time Frame

### ISSUE: ENHANCEMENT OF CITY OPEN SPACE

*Enhanced landscaping and improved maintenance of Carson’s public areas is important to the community. Consideration should be given to the promotion of community gardens and/or passive recreational areas, median treatments in strategic locations, and the aesthetic enhancement of existing open space areas.*

**Goal:** OSC-1: Enhancement of Carson’s open space resources.

**Policies:** OSC-1.1 Preserve and enhance the existing open space resources in Carson.

OSC-1.2 Maintain existing landscaping along the City’s major streets and expand the landscaping program along other arterial streets throughout the community.

OSC-1.3 Require that adequate, usable and permanent private open space is provided in residential developments.

OSC-1.4 Require access between open space and recreation areas and adjacent developments, where appropriate.

OSC-1.5 Utilize electric transmission and other utility corridors for greenbelt and recreational uses where appropriate.

*See also the Goals and Policies in Chapter 2, Land Use Element, of this General Plan.*

### Implementation Measures:

OSC-IM-1.1 Work with other South Bay cities and the County to create and implement a plan to: (1) enhance Dominguez Channel with landscaping and walking and bicycle trails, and (2) provide landscaping along Compton Creek. *(Implements OSC-1.1)*

**RA/D:** Parks and Recreation, Public Works, Planning and Environmental Services, Los Angeles County Department of Public Works



**FS:** General Fund, and Regional, State and Federal Funds/Grants  
**TF:** Ongoing

OSC-IM-1.2 Preserve areas of open space which, if developed, could pose a threat to the health, safety and welfare of the community. To this end, work with the County, the Los Angeles Department of Water and Power, and Southern California Edison to conserve and maintain existing flood control facilities and electric transmission corridors within the City. *(Implements OSC-1.1)*

**RA/D:** Public Works, Planning  
**FS:** General Fund  
**TF:** Ongoing

OSC-IM-1.3 Create and implement a plan to secure access to and develop utility corridors for greenbelt, recreational, and agricultural uses. *(Implements OSC-1.1 and OSC-1.5)*

**RA/D:** Parks and Recreation, Planning  
**FS:** General Fund, State and Federal Funds/Grants  
**TF:** Ongoing

OSC-IM-1.4 Require landscaping of graded areas along public rights-of-way concurrent with project development to minimize erosion and enhance the visual aspects of the community. *(Implements OSC-1.1 and OSC-1.2)*

**RA/D:** Planning  
**FS:** Developers  
**TF:** During review of proposed development projects

OSC-IM-1.5 Examine the potential of extending special median treatments along important arterials, including, but not limited to: Central Avenue (between Turmont Street and University Drive), Wilmington Avenue (between University Drive and Del Amo Boulevard), and along Avalon Boulevard (where right-of-way allows and medians do not presently exist). *(Implements OSC-1.2)*

**RA/D:** Public Works, Planning  
**FS:** General Fund, Development Fees  
**TF:** Ongoing

OSC-IM-1.6 Develop a program to provide parkway landscaping along the edges of important arterials in order to buffer land uses and improve the streetscape. Arterials to be



considered include but are not limited to: University Drive and Avalon Boulevard. *(Implements OSC-1.2)*

- RA/D:** Public Works, Planning
- FS:** General Fund, Development Fees
- TF:** Before adoption of the next update of the City’s Capital Improvement Program after adoption of this General Plan Element

OSC-IM-1.7 Require street trees and appropriate landscaping in both residential and non-residential areas. To this end, review and amend, as necessary, the landscape standards contained in the City’s Zoning Ordinance. *(Implements OSC-1.2)*

- RA/D:** Planning
- FS:** General Fund, Property Owners
- TF:** Ongoing

OSC-IM-1.8 Periodically review Zoning Ordinance provisions to ensure that open space requirements for private development adequate to meet the goals of the City. *(Implements OSC-1.3)*

- RA/D:** Parks and Recreation, Planning
- FS:** General Fund, Property Owners
- TF:** Ongoing

OSC-IM-1.9 Through the development review process, ensure that new developments have access to open space and/or recreation areas, where feasible. *(Implements OSC-1.4)*

- RA/D:** Parks and Recreation, Planning
- FS:** General Fund, Property Owners
- TF:** Ongoing

OSC-IM-1.10 Update the City’s Bicycle Master Plan to enhance opportunities for access to open space and/or recreation areas. *(Implements OSC-1.4)*

- RA/D:** Parks and Recreation, Public Works, Planning
- FS:** General Fund, State and Federal Funds/Grants
- TF:** Within three years after adoption of the General Plan





**ISSUE: WATER QUALITY AND CONSERVATION**

*Measures to conserve water and protect water quality should be employed in Carson, while the use of reclaimed water for landscaping and large industrial uses should be promoted.*

**Goal:** OSC-2: Protection and conservation of Carson’s water resources.

- Policies:**
- OSC-2.1 Maintain and improve water quality.
  - OSC-2.2 Continue to monitor land uses discharging into water sources and water recharge areas, to prevent potential contamination from hazardous or toxic substances.
  - OSC-2.2 Minimize soil erosion and siltation from construction activities through monitoring and regulation.
  - OSC-2.3 Conserve the water supply available to the City and promote water conservation in the management of public properties.
  - OSC-2.4 Educate citizens about water conservation, encourage its practice, and monitor its effectiveness.
  - OSC-2.5 Facilitate the completion of the infrastructure of the reclaimed water facility in the City of Carson.
  - OSC-2.6 Encourage the use of reclaimed water in applications for which potable water is not necessary.

**Implementation Measures:**

- OSC-IM-2.1 Facilitate monitoring of all underground storage tanks, and support EPA’s requirements to remove all single walled underground storage tanks. *(Implements OSC-2.1)*
  - RA/D:** Public Works, Planning
  - FS:** General Fund, State and Federal Funds/Grants
  - TF:** Ongoing
- OSC-IM-2.2 Implement the requirements of the National Pollutant Discharge Elimination System (NPDES) to improve the quality of stormwater in the City. *(Implements OSC-2.1)*
  - RA/D:** Public Works, Planning
  - FS:** General Fund, State and Federal Funds/Grants
  - TF:** Ongoing
- OSC-IM-2.3 Monitor land uses discharging into water sources and water recharge areas to prevent potential contamination



from hazardous or toxic substances. (*Implements OSC-2.1*)

**RA/D:** Public Works, Planning  
**FS:** General Fund, State and Federal Funds/Grants  
**TF:** Ongoing

OSC-IM-2.4 Require revegetation of graded areas concurrent with project development to minimize erosion. (*Implements OSC-2.2*)

**RA/D:** Planning  
**FS:** General Fund, Property Owners  
**TF:** Ongoing

OSC-IM-2.5 Require water conservation design and operation in new development, including enforcement of the City ordinance which requires new development to submit a water conservation plan which meets State requirements, incorporating measures such as the use of low flow plumbing fixtures, drought tolerant plantings, reclaimed water, and water efficient irrigation systems. (*Implements OSC-2.3*)

**RA/D:** Public Works, Planning  
**FS:** General Fund, Developers  
**TF:** During review of proposed development projects

OSC-IM-2.6 Encourage drought tolerant landscaping and low flow or 'drip' irrigation systems as replacements for water consumptive landscaping and irrigation systems in existing development. (*Implements OSC-2.3 and OSC-2.4*)

**RA/D:** Public Information, Information Services, Planning  
**FS:** General Fund, Property Owners  
**TF:** Ongoing

OSC-IM-2.7 Require automatic or computerized irrigation control systems for purposes of water conservation in public land. Identify opportunities for future conversion to the computerized system(s). (*Implements OSC-2.3*)

**RA/D:** Public Works  
**FS:** General Fund  
**TF:** Ongoing



OSC-IM-2.8 Use local media (public service radio and cable television announcements), the City’s Newsletter, school programs, advertising materials such as buttons and bumper stickers, distribution of a home water user’s handbook, and water bill enclosures to inform citizens of the importance of water conservation and to teach its practice. *(Implements OSC-2.4)*

**RA/D:** Public Information, Information Services, Public Works, Planning, Local/Regional Water Agencies

**FS:** General Fund, Water Agency Funds

**TF:** Ongoing

OSC-IM-2.9 Coordinate with water agencies to evaluate the potential to establish a rebate program for the replacement of aging, leaking, and/or inefficient plumbing with more efficient water-saving plumbing. *(Implements OSC-2.3 and OSC-2.4)*

**RA/D:** Public Works, Planning, Local/Regional Water Agencies

**FS:** General Fund, Water Agency Funds

**TF:** Ongoing

OSC-IM-2.10 Work with the West Basin Municipal Water District to ensure the completion of the reclaimed water facility infrastructure in the City of Carson. *(Implements OSC-2.5)*

**RA/D:** Public Works, West Basin Municipal Water District

**FS:** General Fund, Water Agency Funds

**TF:** Until the reclaimed water facility is completed

OSC-IM-2.11 Explore the potential for the development of a reclaimed water system within the City in anticipation of the reclaimed water facility infrastructure being completed. *(Implements OSC-2.5)*

**RA/D:** Public Works

**FS:** General Fund, Development Fees, State and Federal Funds/Grants

**TF:** Determine feasibility before the reclaimed water facility is completed

OSC-IM-2.12 Encourage the use of reclaimed water in industry, construction, landscaping, golf courses, and other uses



where potable water is not necessary. (*Implements OSC-2.5 and OSC-2.6*)

- RA/D:** Public Works, Planning
- FS:** Property Owners, Business Owners, Water Agencies
- TF:** Starting before the reclaimed water facility is completed, and ongoing thereafter

OSC-IM-2.13 Require the installation of reclaimed water lines in new projects and redevelopment projects as appropriate (based on location and use) in anticipation of the completion of the reclaimed water facility infrastructure. (*Implements OSC-2.6*)

- RA/D:** Public Works, Planning
- FS:** Property Owners, Water Agencies
- TF:** Ongoing



**ISSUE: ENERGY CONSERVATION**

*Recent history has shown that constraints on energy supplies due to natural, political or economic causes can have drastic impacts on the conduct of business, industry and the daily lives of the residents in a city. Therefore, energy conservation is of the utmost importance to the economic health of Carson and the quality of life of its residents.*

**Goal:** OSC-3: Conservation of scarce energy resources.

**Policies:** OSC-3.1 Promote incentives for the use of site planning techniques, building orientation, building materials, and other measures which reduce energy consumption.

OSC-3.2 Support the development of alternative sources of energy such as roof-mounted solar panels, fuel cells or new technology.

OSC-3.3 Work with energy providers to develop and implement programs to reduce electrical demand in residential, commercial and industrial developments.

OSC-3.4 Support energy conservation via alternative forms of transportation.

**Implementation Measures:**

OSC-IM-3.1 Where feasible, require all new buildings and subdivisions to be designed and oriented in such a way as



to take maximum advantage of the sun and winds for natural heating and cooling. *(Implements OSC-3.1)*

**RA/D:** Planning  
**FS:** Developers  
**TF:** During review of proposed development projects

OSC-IM-3.2 In addition to enforcing the energy efficiency requirements of state law and the Uniform Building Code, encourage the incorporation of additional energy conservation techniques, such as innovation building construction, high-efficiency HVAC systems, etc. in new construction *(Implements OSC-3.1)*

**RA/D:** Planning  
**FS:** Developers, Federal and State Grants/Funds  
**TF:** During review of proposed development projects

OSC-IM-3.3 Encourage and promote the use of alternative energy sources, such as solar installations and co-generation facilities. *(Implements OSC-3.1)*

**RA/D:** Planning  
**FS:** Developers, Federal and State Grants/Funds  
**TF:** During review of proposed development projects

OSC-IM-3.4 Publicize and support energy conservation incentive programs offered by utility companies, such as rebates to consumers who replace appliances with more energy-efficient models. *(Implements OSC-3.1 and OSC 3.3)*

**RA/D:** Public Information, Information Services, Utility Providers  
**FS:** General Fund, Utility Providers  
**TF:** Ongoing

OSC-IM-3.5 Encourage the use of alternative energy sources, such as solar panels, in the design of new swimming pools and the retrofitting of existing pools, as well as pool covers. *(Implements OSC-3.2)*

**RA/D:** Public Information, Information Services, Planning  
**FS:** General Fund, Property Owners, Developers  
**TF:** Ongoing



OSC-IM-3.6 Work with Southern California Edison and the Southern California Gas Company to educate the public in energy conservation. To this end, use local media (public service radio and cable television announcements), the City’s Newsletter, school programs, advertising materials, such as buttons and bumper stickers, and the distribution of an energy conservation handbook to promote energy conservation techniques and teach its practice. *(Implements OSC-3.3)*

**RA/D:** Public Information, Information Services, Utility Providers  
**FS:** General Fund, Utility Providers  
**TF:** Ongoing

OSC-IM-3.7 Update the Bicycle Master Plan and encourage use of bicycle facilities for commuting, school, shopping and business, as well as for recreational purposes. *(Implements OSC-3.4)*

**RA/D:** Parks and Recreation, Public Works, Planning  
**FS:** General Fund, Development Fees  
**TF:** Within one year after General Plan adoption



**ISSUE: SOLID WASTE REDUCTION**

*As landfills rapidly reach their capacities and new landfills become increasingly more difficult to establish, the need for waste reduction becomes critical.*

**Goal:** OSC-4: Minimize solid waste generated within Carson.

**Policies:** OSC-4.1 Reduce the generation of solid waste from sources in the City in accordance with the Source Reduction and Recycling Element for Carson (separate from this General Plan) and state regulations.

OSC-4.2 Develop a public education program to address waste management and proper household waste sorting and handling.

OSC-4.3 Facilitate physical collection of recyclable waste.

**Implementation Measures:**

OSC-IM-4.1 Achieve solid waste source reduction targets as identified in the City’s Source Reduction and Recycling Element (SRRE) and state regulations. For example, promote such measures as landscape recycling into compost for



reuse as fertilizer, and home pick-up of recyclable materials, including green waste. *(Implements OSC-4.1)*

**RA/D:** Public Works, Waste Haulers  
**FS:** General Fund, Waste Haulers  
**TF:** Ongoing

OSC-IM-4.2 Work with the City’s waste haulers to educate the public in source reduction and recycling. To this end, use local media (public service radio and cable television announcements), the City’s Newsletter, school programs, advertising materials such as buttons and bumper stickers, distribution of a source reduction and recycling handbook, and utility bill enclosures promoting source reduction and recycling techniques in order to inform citizens of the importance of source reduction and recycling and to teach their practices. *(Implements OSC-4.2)*

**RA/D:** Public Information, Information Services  
**FS:** General Fund, Waste Haulers  
**TF:** Ongoing

OSC-IM-4.3 Require that new developments include recycling collection facilities as part of their trash collection areas. *(Implements OSC-4.3)*

**RA/D:** Planning and Environmental Services, Public Works  
**FS:** Developers  
**TF:** During review of proposed development projects

